

REMARKS

The Applicant has filed the present Response in reply to the outstanding Official Action of January 6, 2005, and the Applicant believes the Response to be fully responsive to the Official Action for reasons set forth below in greater detail.

At the onset, the Applicant would thank the Examiner for indicating that Claims 3-9 are allowed and that Claim 2 has allowable subject matter and would be allowed if the claim is rewritten in independent form including the material of the rejected base claim. However, since the Applicant disagrees with the Examiner's rejection of the base claim, Applicant submits that no such amendment is needed at this time.

In the outstanding Official Action, the Examiner rejected Claim 1 under 35 U.S.C. § 102(b) as being anticipated by Leroux et al., United States Patent No. 5,745,009 (hereinafter "Leroux"). Specifically, the Examiner avers that Leroux teaches a first and second inverting amplifier stage where the turn-on voltage of the second stage is higher than the turn-on voltage of the first stage.

Applicant respectfully disagrees with the Examiner's rejection of the claim and traverses the rejection with at least the following analysis.

Insofar as rejections pursuant to 35 U.S.C. § 102 are concerned, it is axiomatic that anticipation pursuant to §102 requires that the prior art reference disclose each and every element of the claim to which it is applied. In re King, 801 F.2d 1324, 1326 (Fed. Cir. 1986). Thus, there must be no differences between the subject matter of the claim and the disclosure of the applied prior art reference. Stated another way, the prior art reference must contain within its four corners adequate direction to practice the invention as claimed. A corollary to the

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aforementioned rule, which is equally applicable, states that the absence from the applied prior art reference of any claimed element negates anticipation. Kloster Speedsteel AB v. Crucible Inc., 793 F.2d 1565, 1571 (Fed. Cir. 1986).

Applicant submits that the Examiner is incorrectly reading the third and fourth amplification stages of the reference as the first and second amplification stages of the present invention. The Examiner appears to arbitrarily select these stages because he believes that these two successive stages include the claimed features. However, the Examiner failed to provide a reason as to why the third and fourth stages of the amplification cycle are equivalent to and read on the first and second stages of the claimed invention.

The claimed invention only includes two amplification stages. By only using two stages the size of the circuit is smaller and more circuits can fit on a chip. Whereas the circuit disclosed in the prior art reference has a plurality of amplification stages (4) having several resistors and other circuit elements.

Additionally, node 300 is not a wiring through which a signal to be amplified is passed, but a wiring to determine a clamping voltage. The signal to be amplified is input to a gate of the fourth transistor T4 through junction 3a, a third transistor T3, a junction 3b, a **capacitor** C4, and a junction 4a.

The capacitor C4 is inserted between the junction 3b, which is a drain of the third transistor T3 and the junction 4a, which is the gate of the fourth transistor. Therefore, the reference discloses that the third and fourth transistors (T3 and T4) **are AC coupled.**

In stark contrast, a second inverting amplifier 15 in the second stage is connected directly (DC-coupled) to a first inverting amplifier 14 in the first stage at node N2.

Accordingly, the reference fails to teach or suggest “ a second inverting amplifier placed in a second stage, said second inverting amplifier **being DC-coupled to said first inverting amplifier**”, as specifically recited in Claim 1 (Emphasis added).

Moreover, the Examiner contends that the turn-on voltage of T4 will be higher than T3 since bias resistor R4 is a much higher value than resistor R3. This statement is not necessarily true. The bias resistor does not solely control the threshold voltage of a transistor. The channel width length, ion doping, and the substrate used during fabrication also determine the threshold voltage. The reference does not suggest that subsequent stages in the inverted amplification cycle should have a larger threshold voltage. In fact, the first and second stages have the exact same bias resistor value ($R1=R2$). Using the Examiner’s logic, the threshold voltage of the first and second stage transistors would be the same. Additionally, the third stage transistor would have a lower threshold voltage than the first and second stage.

Accordingly, the reference fails to teach “an amplifying operation starting input voltage in said first inverting amplifier is set to be lower than an amplifying operation starting input voltage in said second inverting amplifier”, as recited in Claim 1.

Therefore, the reference fails to teach or suggest each and every element of the claim and thus does not anticipate the claim under 35 U.S.C. § 102(b).

For all the foregoing reasons, the Applicant respectfully requests the Examiner to withdraw the rejection of Claim 1 pursuant to 35 U.S.C. § 102(b).

In conclusion, the Applicant believes that the above-identified application is in condition for allowance and henceforth respectfully solicits the Examiner to allow the application. If the Examiner believes a telephone conference might expedite the allowance of this application, the Applicant respectfully requests that the Examiner call the undersigned, Applicant's attorney, at the following telephone number: (516) 742-4343.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Seth Weinfeld", written over a horizontal line.

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